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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,918	02/03/2006	Neil Walter Lindh Adcock	006422.00036	9961

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TULSA, OK 74103

EXAMINER

TOLAN, EDWARD THOMAS

ART UNIT	PAPER NUMBER
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3725

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12/10/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/566,918	Applicant(s) LINDH ADCOCK, NEIL WALTER	
	Examiner EDWARD TOLAN	Art Unit 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9 and 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 8 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3,7,9 and 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Venturini (6,949,100) in view of Reynolds (3,975,788). Venturini discloses a tapping screw (column 3, lines 3-6) that is applied to a product with a high torque. The tapping screw has symmetrical triangular threads with a thread angle (α) of 30 degrees (column 3, line 16). The tapping screw is conically shaped and is tapered toward its tip. The thread roots are radiussed to 0.2 mm (column 3, lines 26-27). Venturini discloses milled grooves (11,12). Venturini discloses flat milled surfaces (3) for connection to a rotating tool. It is inherent that application of Venturini to a metal object will result in a same threadform being produced as the 30 degree angle of a bone product. Venturini does not disclose that the thread crests are radiussed. Reynolds teaches a tapping bolt (40) having radiussed crests (42) and a chamfer (fig. 3). It would have been obvious to one skilled in the art at the time of invention to provide radiussed crests to the tap of Venturini as taught by Reynolds in order to increase friction contact between a thread surface of the product and the tapping screw for increased locking ability.

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Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Venturini (6,949,100) in view of Reynolds (3,975,788) and further in view of Vilmanyi (5,725,336). Venturini in view of Reynolds does not disclose a chamfer angle. Vilmanyi teaches (column 2, lines 6-9) that it is known to have a chamfer angle of 6-8 degrees in a tap. It would have been obvious to one skilled in the art at the time of invention to chamfer the tap of Venturini in view of Reynolds to an angle as taught by Vilmanyi by taking cutting conditions into consideration, the choice of angle being depending upon material type.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Venturini in view of Reynolds and further in view of Sawabe (5,797,710). Venturini discloses a pitch of 1.25mm. Sawabe teaches that it is known to provide a pitch of 1mm (column 3, line 36). It would have been obvious to one skilled in the art at the time of invention to provide Venturini in view of Reynolds with a thread pitch of 1mm as taught by Sawabe in order to have a fine thread pitch.

Allowable Subject Matter

Claims 8 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant's crest and root curvature radius are not disclosed by the prior art.

Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection. Venturini is a tapping screw used in a high torque tapping operation. The bone tapped by Venturini is a product with a thread corresponding to the tapping screw. The tapping screw and bone are a male/female part and the tapping screw is movable in translation in relation to the bone.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication should be directed to Ed Tolan whose telephone number is 571-272-4525. FAX communications should be sent to 571-273-8300.

/Edward Tolan/

Primary Examiner, Art Unit 3725